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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/316,905	05/21/1999	KENNETH J. SCHRODER		8463

7590 02/04/2004

RINES AND RINES
81 NORTH STATE STREET
CONCORD, NH 03301

EXAMINER

WILLETT, STEPHAN F

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 02/04/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/316,905

Applicant(s)

Schroder et al.

Examiner

Stephan Willett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 15, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.
2. The information disclosure statement filed on 7/6/99 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because a list of the references and a copy of the references is not provided. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 C(1).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The “along one of said paths” is unclear. Thus, it is assumed that since “the software information in one of such preselected router nodes” is for the router and is not a routing table with addresses and path information, but routing software to manage said addresses and paths, that the upgrade does not apply to or effect only “one path” since the router is routing among numerous predetermined paths when the upgrade is performed .

Claim Objections

5. Claim 6 is objected to because of the following informalities: “one off” is misspelled.. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

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obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holte-Rost et al. with Patent Number 6,101,327 in view of RFC 1269.

9. Regarding claim(s) 1 and 6, Holte-Rost teaches router nodes controlled by software, col. 5, lines 42-44 wherein input and output ports associated with a routing/server device are paths. Holte-Rost teaches upgrading software, col. 5, lines 54-57. Holte-Rost teaches continuing operation while updating software, col. 6 and 9, lines 62-66, 8-10, respectively. Holte-Rost teaches preparing software information, col. 7, lines 4-8. Holte-Rost teaches swapping software, col. 7, lines 41-44. Holte-Rost teaches a swap without interruption, col. 10, lines 19-21 and 42-48. Holte-Rost teaches an imperceptible swap as “the smooth System Upgrade method applied on the resource server”, col. 10, lines 29-30 and this reads on a server used as a router in a network. Holte-Rost teaches the invention in the above claim(s) except for explicitly teaching updating in a multiple router environment. In that Holte-Rost operates to update network software, the artisan would have looked to the reconfiguring network arts for details of implementing multiple software upgrades. In that art, RFC 1269, a related network router, teaches definitions of “an IAB standards track protocol for the Internet community”, page 1, lines 8-9, “objects for managing the Border Gateway Protocol”, page 1, lines 17-18, and “this memo defines a portion of the management information Base”, page 1, lines 6 in order to provide effective multi-node routing. RFC 1269 specifically teaches “the planned use of BGP in the

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Internet environment ... the interaction between BGP and IGPs, and the enforcement of routing policy rules”, page 2, lines 51-54. Multiple node routing is taught. Further, RFC 1269 suggests that “the primary function of a BGP speaking system is to exchange network reach ability information with other BGP system”, page 2, lines 30-31 which will result from using multiple routers. The motivation to incorporate multiple routers insures that diverse and widespread routing is available in today’s Internet world. Thus, it would have been obvious to one of ordinary skill in the art to incorporate multiple routers as taught in RFC 1269 into the router upgrading software system described in the Holte-Rost patent because Holte-Rost operates with various upgrades and RFC 1269 suggests that optimization can be obtained with multiple routers. Therefore, by the above rational, the above claim(s) are rejected.

10. Regarding claim(s) 2, 7, 12-16, Holte-Rost teaches software upgrades. Holte-Rost teaches the invention in the above claim(s) except for explicitly teaching using BGP, SNMP, MIBs, software backplane architectures, control and data methods interfaces, active router modules, CLI, SNMP and HTTP in routing. However, Official Notice is taken MPEP 2144.03 (a)) that BGP, SNMP, MIBs, software backplane architectures, control and data methods interfaces, active router modules, CLI, SNMP and HTTP in routing is well known in the art to insure dynamic routing capabilities. RFC 1269 specifically teaches “SNMP MIB”, page 1, lines 8. BGP, SNMP, MIBs, software backplane architectures, control and data methods interfaces, active router modules, CLI, SNMP and HTTP is taught. It would have been obvious to one of ordinary skill in the art at the time of the application's invention to use BGP, SNMP, MIBs, software backplane architectures, control and data methods interfaces, active router modules,

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CLI, SNMP and HTTP in routing to obtain the advantages of communicating with known protocols and hardware. Therefore, by the above rational, the above claim(s) are rejected.

11. Regarding claim(s) 3, 8, Holte-Rost teaches revisions and upgrades are part of the new software package, col. 6, lines 19-22. Thus, the above claim limitations are obvious in view of the combination.

12. Regarding claim(s) 4, 9, Holte-Rost teaches new software install notification, col. 7, lines 46-49. Thus, the above claim limitations are obvious in view of the combination.

13. Regarding claim(s) 3, 10, Holte-Rost teaches preparation for the software upgrade, col. 7, lines 21-22. Thus, the above claim limitations are obvious in view of the combination.

14. Regarding claim(s) 11, 17, 20, Holte-Rost teaches IP Messaging and linking, col. 6, lines 23-27. Thus, the above claim limitations are obvious in view of the combination.

15. Regarding claim(s) 18-19, 21-22, Holte-Rost teaches a task state interface and table, col. 9, lines 1-8 and 22-25. Thus, the above claim limitations are obvious in view of the combination.

Response to Amendment

16. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

17. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

18. Applicant suggests "software shutdown", Paper No. 13, Page 7, lines 13-14 type of upgrade process. In an effort to further prosecution, further clarity is required as noted above, but

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also with regard to “without any internal or external interruption”. There must be some interruption relative to some process in the whole router when upgrading, thus this limitation is interpreted as a broad limitation and clarity is suggested. With regard to Holte-Rost, Holte-Rost does not teach a “shutdown”, but temporarily rerouting traffic, and then even testing the new router before the new router is brought on-line to route data. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

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Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the references is suggested. The other references cited teach numerous other ways to perform uninterrupted router upgrades as is claimed, thus a close review of them is suggested.

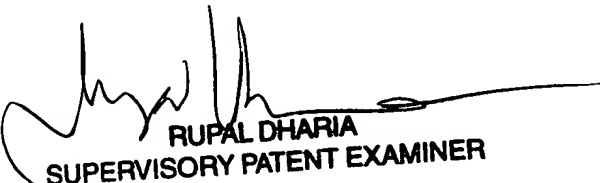
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

22. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

February 2, 2004


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER